



Atty. Dkt. No. 016782-0327

TFW

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Peter PERSOONE et al.

Title: AN INFRA-RED REFLECTING LAYERED STRUCTURE

Appl. No.: 10/533,890

International 10/23/2003

Filing Date:

371(c) Date: 5/5/2005

Examiner: Unassigned

Art Unit: 1775

Confirmation 9698

Number:

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR §1.56**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

**TIMING OF THE DISCLOSURE**

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

**RELEVANCE OF EACH DOCUMENT**

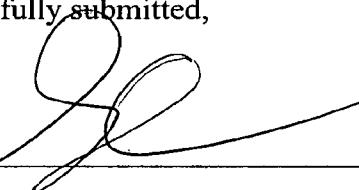
All of the documents are in English.

Applicants respectfully request that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

Although Applicant believes that no fee is required for this Request, the Commissioner is hereby authorized to charge any additional fees which may be required for this Request to Deposit Account No. 19-0741.

Respectfully submitted,

By

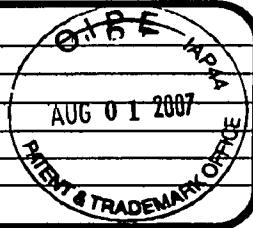
  
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Date August 1, 2007

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Substitute for form 1449/PTO				Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Application Number	10/533,890
Date Submitted: August 1, 2007 <i>(use as many sheets as necessary)</i>				Filing Date	10/23/2003
Sheet	1	of	4	First Named Inventor	Peter PERSOOONE
				Art Unit	1775
				Examiner Name	Unassigned
				Attorney Docket Number	016782-0327

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
A1	US-2,456,241-	12-14-1948	AXLER ET AL.		
A2	US-3,649,359-	03-14-1972	APFEL ET AL.		
A3	US-4,240,696-	12-23-1980	TRACY ET AL.		
A4	US-4,799,745-	01-24-1989	MEYER ET AL.		
A5	US-5,071,206-	12-10-1991	HOOD ET AL.		
A6	US-5,591,529-	01-07-1997	BRAATZ ET AL.		
A7	US-5,595,825-	01-21-1997	GUISELIN, OLIVIER		

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Documents	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
A8	WO-99/36809-A1		07-22-1999	MINNESOTA MINING AND MANUFACTURING CO.		

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
A9		A.A. MARADUDIN et al., "Photonic band structure of a truncated, two-dimensional, periodic dielectric medium," Journal of Optical Society of America B, Vol. 10, No. 2, Feb. 1993, pgs. 307-313.	
A10		B.E. A. SALEH et al., "Fundamentals of Photonics," Second Edition, pgs. 58-66, 243-279.	
A11		C. WOODWARD et al., "Polymeric 1-D Photonic Crystals," printed from Internet 2007.	
A12		C.M. BOWDEN et al., "Development and Applications of Materials Exhibiting Photonic Band Gaps," Introduction, Journal of Optical Society of America B, Vol. 10, No. 2, Feb. 1993,	
A13		D.L. BULLOCK et al., "Photonic band structure investigation of two-dimensional Bragg reflector mirrors for semiconductor laser mode control," Journal of Optical Society of America B, Vol. 10, No. 2, Feb. 1993, pgs. 399-403.	
A14		D.R. SMITH et al., "Photonic band structure and defects in one and two dimensions," Journal of Optical Society of America B, Vol. 10, No. 2, Feb. 1993, pgs. 314-321.	

Examiner Signature	/Gwendolyn Blackwell/	Date Considered	02/03/2008
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				<b>Application Number</b>	10/533,890
Date Submitted: August 1, 2007 <i>(use as many sheets as necessary)</i>				<b>Filing Date</b>	10/23/2003
				<b>First Named Inventor</b>	Peter PERSOOONE
				<b>Art Unit</b>	1775
				<b>Examiner Name</b>	Unassigned
Sheet	2	of	4	Attorney Docket Number	016782-0327

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	A15	E. YABLONOVITCH, "Engineered omnidirection external-reflectivity spectra from one-dimensional layered interference filters," Optics Letters, Vol. 23, No. 21, Nov. 1, 1998, pgs. 1648-1649.	
	A16	E. YABLONOVITCH, "Photonic band-gap structures," Journal of the Optical Society of America B, Vol. 10, No. 2, Feb. 1993, pgs. 283-295.	
	A17	E. YABLONOVITCH, "Photonic Crystals: Semiconductors of Light," Scientific American, December 2001, pgs. 47-55.	
	A18	E.E. BARR, "Visible and Ultraviolet Bandpass Filters," Optical Coatings-Applications and Utilization, Proceedings of the Society of Photo-Optical Instrumentation Engineers, Vol. 50, 1974, pgs. 87-118.	
	A19	H.A. MACLEOD, "A new approach to the design of metal-dielectric thin-film optical coatings," Optica Acta, Vol 25, No. 2, 1978, pgs. 93-106.	
	A20	H.A. MACLEOD, "Multiple Cavity Metal-Dielectric Filters," Thin-film Optical Filters, Second Edition, 1986, Bristol:Adam Hilger, pgs. 292-308.	
	A21	H.S. SÖZÜER et al., "Photonic bands: Convergence problems with the plane-wave method," Physical Review B, Vol. 45, No. 24, June 15, 1992-II, pgs. 13 962-13 972.	
	A22	J. KOUBA et al., "Conference 6182: Photonic Crystal Materials and Devices: Metallic photonic crystal for THz radiation," 6182-34, Session 6, An SPIE Europe Event, pg. 18.	
	A23	J.H. APFEL, "Graphics in Optical Design," Applied Optics, Vol. 11, No. 6, June 1972, pgs.1303-1312.	

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	A24	Juh-Tzeng LUE et al., "Optical filters constructed from multilayers of dielectric and thin metallic films operating in the anomalous skin effect region," Journal of the Optical Society of America B, Vol. 6, No. 6, June 1989, pgs. 1103-1105.	
	A25	K.M. HO et al., "Existence of a Photonic Gap in Periodic Dielectric Structures," Physical Review Letters, Vol. 65, No. 25, Dec. 17, 1990, pgs. 3152-3155.	
	A26	M. SCALORA et al., "Metals under a new light," Optics and Photonics News, Sept. 1999, 10(9), pgs. 24-27.	
	A27	M. SCALORA, "Photonic Band Gap Metal Films for Light Filtering Applications," Pgs. 1-6.	
	A28	Macleod Medium, Vol. 7, No. 1, March 1999, pgs. 1-8.	
	A29	Macleod Medium, Vol. 7, No. 3, October 1999, pgs. 1-8.	
	A30	P. PERSOOONE et al., "Spectrally selective optical filter for many applications," AIMCAL 2003 Fall Technical Conference and 17th International Vacuum Web Coating Conference, Oct. 26-29, 2003, pgs.,1-8.	
	A31	P. PERSOOONE et al., "Spectrally selective optical filter for many applications," Powerpoint Presentation, AIMCAL 2003 Fall Technical Conference and 17th International Vacuum Web Coating Conference, Oct. 26-29, 2003, pgs.,1-17.	

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Date Submitted: August 1, 2007

(use as many sheets as necessary)

Sheet

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	A32	P.H. BERNING et al., "Induced Transmission in Absorbing Films Applied to Band Pass Filter Design," Journal of the Optical Society of America B, Vol. 47, No. 3, March 1957, pgs. 230-239.	
	A33	R. GUEITHER, "The Berlin scientist and educator Wilhelm Zenker (1829-1899) and the principle of color selection," Proceedings of the Society of Photo-Optical Instrumentation Engineers, 1999, 3738:pgs. 20-29.	
	A34	R.D. MEADE et al., "Accurate theoretical analysis of photonic band-gap materials," Brief Reports, Physical Review B, Vol. 48, No. 11, Sept. 15, 1993-I, pgs. 8434-8437.	
	A35	R.D. MEADE et al., "Nature of the photonic band gap: some insights from a field analysis," Journal of Optical Society of America B, Vol. 10, No. 2, Feb. 1993, pgs. 328-332.	
	A36	R.D. MEADE et al., "Photonic bound states in periodic dielectric materials," Rapid Communications, Physical Review B, Vol. 44, No. 24, Dec. 15, 1991-II, pgs. 13772-13774.	
	A37	S.G. JOHNSON, Photonic Crystals: Periodic Surprises in Electromagnetism, 29 pgs.	
	A38	Ze ZHANG et al., "Electromagnetic Wave Propagation in Periodic Structures: Bloch Wave Solution of Maxwell's Equations," Physical Review Letters, Vol. 65, No. 21, Nov. 19, 1990, pgs. 2650-2653	

Examiner Signature

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